

PASCC Final Report¹ "Deterring Rogue Regimes: Rethinking Deterrence Theory and Practice"

Scott D. Sagan²
Center for International Security and Cooperation
Stanford University
July 8, 2013

Iraq represents a significant historical case for assessing the effectiveness of deterrent threats on containing the ambitions of would-be nuclear states. The Conflict Records Research Center (CRRC) at the National Defense University houses copies of a vast collection of records captured from Saddam Hussein's Iraq during the 2003 Gulf War. These records contain many audio recordings and direct transcripts of high-level meetings between Saddam Hussein and his advisors and senior cabinet, shedding unprecedented light on Saddam's thinking throughout the life of Iraq's nuclear program and the two Gulf Wars. These records allow for a more thorough understanding of the motivations and intentions of Iraq's nuclear, chemical, and biological weapons programs, the non-use of chemical weapons in the 1991 Gulf War, and what effect U.S. deterrent capabilities and threats had on Iraq's actions.

With funding from the Naval Postgraduate School's Project on Advanced Systems and Concepts for Countering WMD, Scott D. Sagan at the Center for International Security and Cooperation (CISAC) at Stanford University undertook a project to facilitate the translation and analysis of sources from the CRRC archives to learn lessons about preventing proliferation and deterring WMD use and to discuss these lessons with U.S. government officials. The project succeeded in improving our understanding of Iraqi decision-making regarding WMD and

² Thank you to Benjamin Buch and Reid Pauly for assistance with preparation of this final report.

¹ Grant No. N00244-12-1-0025; PASCC is supported by the Defense Threat Reduction Agency.

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Info	regarding this burden estimate ormation Operations and Reports	or any other aspect of the property of the pro	nis collection of information, Highway, Suite 1204, Arlington
1. REPORT DATE 08 JUL 2013 2. REPO		2. REPORT TYPE	3. DATES COVERED 00-00-2013 to 00-00-2013		
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER	
Deterring Rogue Regimes: Rethinking Deterrence Theory and Practice				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Stanford University, Center for International Security and Cooperation, 616 Serra St , Stanford, CA, 94305-6055				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited			
13. SUPPLEMENTARY NO	OTES				
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFIC	17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	16	

Report Documentation Page

Form Approved OMB No. 0704-0188 deterrence, and provided comparative lessons to be learned from this history for U.S. nuclear weapons policy toward new and potential nuclear weapons proliferators.

This project had four categories of deliverables: translation of documents, commissioning of documents analysis papers, hosting of workshops to discuss lessons learned, and policy outreach efforts. All were achieved.

Workshops

The project hosted three major meetings. The first was a meeting of an advisory group, called together at the National Defense University in Washington, DC to identify key questions to be answered by the project and develop a strategy for research. Participants included: Christopher Alkhoury, Seth Carus, Seth Center, Norman Cigar, Charles Duelfer, Michael Eisenstadt, Lorry Fenner, Gregory Koblentz, David Mack, Scott Norwood, David Palkki, Reid Pauly, Ken Pollack, Scott Sagan, Margaret Sloane, Amy Smithson, Kevin Woods, and Judith Yaphe. This advisory body set the scope of the project and helped to identify key researchers and discussants for the substantive archival research and participants for future workshops.

The second meeting was a workshop held in Vienna, Austria, where authors presented their commissioned papers to an elite group of scholars, former policymakers, and former scientific advisors to Saddam Hussein. Malfrid Braut-Hegghammer, Rolf Ekéus, Gudrun Harrer, David Palkki, and Kevin Woods all contributed papers to the workshop. Other participants commented on these papers based on personal experiences and interpretation of the new archival evidence available on a password-protected website. This small group of highly qualified scholars and former practitioners engaged in two days of intense and in-depth discussion of the motivations, intentions, capabilities, and decision-making of Saddam Hussein's nuclear weapons

program. The paper authors benefitted immensely from commentary from Iraqi participants, who were there on the ground in Iraq to witness many of the milestones of the nuclear weapons program that were being discussed. Overall the participants provided important competing perspectives and interpretations of the facts presented in the documents. Indeed, some of the most interesting lessons learned emerged from understanding how each side perceived and misperceived the actions of the other during the interactions between Iraq and the West.

The third and final workshop was held at the Woodrow Wilson Center in Washington, DC and was co-hosted by the Wilson Center's Nuclear Proliferation International History Project. This workshop, entitled "Deterring New Nuclear Weapons States?: Lessons From Saddam Hussein's Iraq," presented the final research papers commissioned by this project, and approximately 40 members of the academic and policy communities gathered to discuss the lessons learned from this new evidence and how they can be applied to the challenge of deterring new nuclear states today. The workshop consisted of two distinct panel discussions. The first panel focused specifically on the case of Iraq and what these captured records reveal about Iraqi decision-making. Malfrid Braut-Hegghammer, Charles Duelfer, Rolf Ekéus, and David Palkki presented on this panel and Robert Litwak chaired the discussion. The second panel broadened the scope to apply these deterrence lessons to the cases of Iran, North Korea, and unidentified potential future proliferants. Former and current policymakers Victor Cha, John Harvey, and Gary Samore spoke on the second panel and Scott Sagan chaired the discussion. John Harvey's comments were off-the-record, but prompted a fruitful discussion. In conjunction with this final workshop, the CRRC publicly released 26 of the many translated documents prepared for this

project.³ More translations of captured records are on their way through the pipeline for public release.

Papers

This project commissioned and distributed five papers which were written based on the captured records.

Malfrid Braut-Hegghammer, "A Baath Bomb? Iraq's nuclear program (1956-81)"

Malfrid Braut-Hegghammer wrote about the genesis of the Iraqi nuclear program. The traditional interpretation is that Saddam ordered a nuclear weapons program in the 1970s that was interrupted by the Israeli strike on the Osirak reactor in 1981. A closer review of new archival evidence and interviews with senior Iraqi scientists reveals a more complicated picture. Through the 1950s and 1960s Iraq's program was focused on education and exploration, its nuclear program was not yet even directed towards nuclear power. In 1968 the Ba'ath party came to power and in the early 1970s some nuclear scientists began advocating a weapons program as a way to get more funding and prestige for nuclear research.

In the late 1970s, the goals of the program were ambiguous. Nuclear scientists that were not members of the Baath party were focused mainly on nuclear experiments, while some in the Baathist party thought that the Osirak reactor, purchased from France in the early 1970s, could be used in a breakout program. The program stalled after the Iranian revolution when two senior scientists were jailed, Jafar D. Jafar on suspicion of being a member of the Dawa party and Husain Shahristani for protesting his colleague's arrest.

4

³ The 26 public documents can be accessed here: http://crrc.dodlive.mil/collections/sh/.

The 1981 attack, Braut-Hegghammer contends, far from stalling Iraq's nuclear ambitions, was the catalyst that restarted Iraq's nuclear program and encouraged a determined and large-scale, but covert, pursuit of nuclear weapons. Braut-Hegghammer concludes:

- Members of the nuclear establishment are often faced with bureaucratic incentives to both exaggerate capabilities and encourage a weapons program, such as bringing prestige or greater funding to their agencies.
- 2. Early nuclear programs often do not have well developed goals and the leadership may be ambivalent about nuclear weapons ambitions.
- 3. The use of force by an adversary can have a counterproductive effect if the goal is to stop a nuclear weapons program, especially if that program is stalled or ambiguous. In the case of Iraq, the Israeli attack may have helped unify the opinions of the Iraqi leadership, bureaucracy, and scientific establishment on the need for an Iraqi nuclear deterrent.

Rolf Ekéus, "WMD, Iraq, and the USA"

Rolf Ekéus, former head of the United Nations Special Commission on Iraq, wrote a paper reviewing the history of UNSCOM and commenting on other aspects of the 1991 and 2003 Gulf Wars. Ekéus notes that Saddam's high level of popularity following the end of the Iran-Iraq War helps to explain his decision to invade Kuwait. While the Iran-Iraq War was difficult from a military perspective, it was a highly successful war from a political perspective. Saddam got the political backing of every Arab state except for Syria and also received intelligence support from the United States, attack planes from France, and SCUD missiles from the Soviet Union. Saddam's popularity at the beginning of the Gulf War can thus help explain his decision to invade Kuwait.

Ekéus then reviewed the history of UNSCOM, noting that the International Atomic Energy Agency (IAEA) was the usual body to handle weapons inspection and verification. However, incentives in the IAEA were skewed towards certifying a program was not dangerous, so the U.S. pushed a decision to create a new body whose job it was to investigate non-declared capabilities. On April 3, 1991, UN Security Council resolution 687 called for Iraq to accept the unconditional removal and destruction of its stockpiles of weapons of mass destruction. By June 9, 1991, UNSCOM began its inspections.

Rolf Ekéus recalls that initially UNSCOM cooperated closely with the IAEA in their activities, but eventually evolved into a separate organization tasked specifically with ferreting out hidden capabilities. While initially intelligence sharing between the U.S. government and UNSCOM was strong, it ebbed and flowed over the life of UNSCOM. Ekéus recalled that getting a U2 spy plane was enormously helpful to UNSCOM and that the Clinton administration was much less supportive of UNSCOM than the Bush administration.

The biggest problem UNSCOM faced was selling cooperation to the Iraqis. The easiest selling point was the removal of sanctions, but this would only work if sanctions could be credibly removed after Iraq was decreed free of WMD. However, lifting sanctions was politically untenable for the American leadership, weakening the credibility of such carrots.

Overall, Ekéus notes that UNSCOM was set up to help cover the weaknesses in the IAEA inspection regime, in particular the fact that the IAEA wasn't set up to find non-declared facilities. Moreover, UNSCOM was constrained by its intelligence capacity and by the level of political support from the United States.

Gudrun Harrer, "The International Atomic Energy Agency's Role and Perspective on Iraqi Nuclear Dismantlement 1991-2003"

Gudrun Harrer wrote a paper based on the documents housed at CRRC and documents that she received access to at the IAEA Action Team archives. Through her paper she tells the IAEA perspective of the inspections of Iraq and highlights the successes and failures of the IAEA approach to the case of Iraqi proliferation. While it is easy to blame the IAEA for failing to prevent Iraq from developing a nuclear weapons program, the truth is much more nuanced, as she argues that the IAEA may be faulted for making unwise judgments, but in the context of limited access to Iraq and a nonintrusive inspection culture. Harrer argues that the IAEA did not cover anything up to allow an Iraqi program to incubate.

Harrer's account of the bureaucratic conflicts between the IAEA and UNSCOM in the context of U.S. political pressure sheds valuable light on the successful and unsuccessful tactics employed to rid Iraq of WMD. Her detailed description of the inspections procedures reveals the underappreciated importance of luck and coincidence in the ultimate success of Iraqi disarmament.

David Palkki, "Calculated Ambiguity, Nuclear Weapons, and Saddam's Strategic Restraint"

David Palkki's paper focused on Saddam Hussein's choice not to use chemical weapons during the 1991 Gulf War. This presents a historical puzzle given Iraq's vast stockpiles of chemical weapons and prior use of chemical weapons to great effect during the Iran-Iraq war. Four primary explanations for non-use have been advanced, two of which place much faith in the effectiveness of U.S. deterrent threats.

- Saddam was deterred from using chemical weapons by the threat of American nuclear retaliation. Proponents of this explanation have pointed to threats issued in a meeting on January 9, 1991, by Secretary of State James Baker and in a letter written by President George H.W. Bush.
- 2. Saddam was deterred from using chemical weapons because he feared that use would cause the United States to shift to a policy of regime change.
- 3. Saddam did not use chemical weapons because he thought they would be militarily ineffective against American forces.
- 4. Saddam wanted to use chemical weapons, but for some reason was unable to launch.

Palkki argues that the first explanation is the most accurate, but thinks that Secretary Baker's threats and President Bush's letter had little to do with the strength of this threat. Instead Saddam's fear of American nuclear use came from pre-existing beliefs. As early as April 1990, the Iraqis were studying how to react when "Baghdad is struck by atomic bombs." Saddam worried that casualty aversion would lead the U.S. to resort to nuclear weapons. Saddam was also convinced that the U.S. nuclear threat was credible because of U.S. nuclear use against Japan in the Second World War and because of a misguided belief that the United States had used chemical weapons against enemy forces in the Vietnam War. Tariq Aziz is quoted as stating in the captured records that if Iraq were to use chemical weapons, "we would give them an excuse for a nuclear attack."

Palkki argues that regime change as a deterrent threat was unlikely because Saddam expected the United States to pursue a policy of regime change whether Saddam used chemical weapons or not. For a deterrent threat to be credible, it must be believable not just that the

punishment will be applied if the other state performs a forbidden action but also that punishment will be withheld if the other state refrains. This same logic could be applied to the nuclear threat as well. If Saddam thought the U.S. was likely to use nuclear weapons whether or not Iraq used chemical weapons, the nuclear threat was not likely to serve as a deterrent. Palkki acknowledges this shortcoming, but contended the Iraqis believed that use of chemical weapons would at least make U.S. nuclear use more likely. He also pointed out that the fact that Saddam went to war while still believing that American use of nuclear weapons was a real possibility should dampen the optimism of those who believe war is highly unlikely under the shadow of a nuclear threat.⁴

Palkki also discusses the impact of the revelation in Brent Scowcroft's memoirs that nuclear threats during the 1991 Gulf War were bluffs, thus weakening the credibility of future nuclear deterrent threats by the United States. Despite reading Scowcroft's memoirs, Saddam was still worried in meetings about the possibility of the United States using nuclear weapons. However, one participant suggested that the fear of decreased effectiveness might have led the U.S. to bluff "louder" in the lead up to the 2003 Gulf War than in the lead up to the first.

Finally, Palkki views ambiguous signals as ineffective for deterrence because they are neither clear nor binding. The most effective signals for deterrence in Palkki's view are those that clearly link action with punishment and are delivered publicly so that leaders in the country issuing a threat face some cost for not following through on their threat.

-

⁴ Rolf Ekéus argued that part of the decision not to use chemical weapons on the battlefield could be explained by the reduction of Iraqi production capacity as a result of American bombing at the start of the Gulf War. While the Iraqis had large stockpiles of nerve agents, the effectiveness of these agents was reduced sharply with time. In the Iran-Iraq war, the Iraqis adopted a just-in-time delivery system where nerve agents were sent to the front immediately after being produced. The destruction of Iraqi production capability prevented them from using this system and would have forced them to use less effective stockpiled agents or less impressive chemical agents like mustard gas. Given this predicted decreased effectiveness and the sophistication of American countermeasures as compared to the Iranians, the Iraqis likely calculated that chemical weapons would be less effective.

Kevin Woods, "Testing the Lessons of Coercion: The Case of Iraq - October 1994"

Kevin Woods' research paper used new evidence uncovered in the CRRC documents to shed light on a specific case of the debated effectiveness of U.S. coercion: Iraq's military build-up along the Kuwaiti border in October 1994. The events of October 1994 have largely been shrouded in mystery. It is often assumed that Saddam was coerced in October 1994 when he moved troops to the Kuwaiti border, only to back down.

Woods reassesses these events of October 1994 and identifies three main goals of Saddam Hussein. Through his deployments, Woods argues, Saddam sought to portray Iraq as a victim, gain a clearer understanding of inspections and timeline of lifting of sanctions, and he wanted to elicit support from Russia and China and create opportunities for them to help Iraq. Prior to the October 1994 troop movements, Iraq issued public pronouncements that were very similar to the public pronouncements and threats made against Kuwait prior to the 1990 invasion.

After he backed down, Saddam seems to have been pleased with what happened in October 1994, though he probably would have been even happier if the US had launched an airstrike. Iraq thought it saw progress in what the Russians started to say after the incident regarding the necessity of dealing with the Kuwait-Iraq border issue, along with lifting of sanctions. Woods concludes that Saddam intended not to reinvade Kuwait in 1994, but to manufacture a crisis.

Individual paper authors have been encouraged to publish their research papers independently and will continue to work with Scott Sagan as appropriate.

International Studies Association Roundtable

This project held a roundtable discussion at the International Studies Association conference in April 2013 on "Can New Nuclear Weapons States Be Deterred?" Participants in the panel were: Scott Sagan, Vipin Narang, Marc Trachtenberg, David Palkki, James Fearon, and Malfrid Braut-Hegghammer. The event was attended by approximately 100 people, mostly scholars and graduate students. The panel drew heavily upon the Iraqi case for evidence of how new nuclear weapons states might behave. It was a first attempt at broadening the lessons of our project on Iraq to draw conclusions for the future effective practice of deterrence.

Conclusions and Lessons Learned

The research for this project coalesced into four main themes:

1. The effectiveness of U.S. deterrent threats in the 1991 Gulf War.

Debate about Iraq's non-use of chemical weapons in the 1991 Gulf War has centered on whether the United States' threat to use nuclear weapons or to depose Saddam Hussein played a larger role in constraining Saddam's decision-making. The new records point to a possible third option: that Saddam viewed chemical weapons as a deterrent threat to prevent an American march on Baghdad and he did want to use them earlier in a war to save them for continued deterrence of regime change or retaliation in the event that the coalition forces attacked Baghdad. Saddam also fought the 1991 Gulf War despite his belief that American first-use of nuclear weapons was a real possibility.

An event that has been highlighted as a case of deterrent failure is the decision to burn the Iraqi oil fields in 1991. However, new evidence suggests that Saddam Hussein did not order the burning of the oil fields; instead a commander in the field made this decision when he could not communicate with Baghdad and feared the worst. This highlights a tension in targeting command and control structures; destroying an enemy's command and control makes a war effort more likely to be successful, but also makes the behavior of an adversary more erratic, which is especially dangerous in the case of nuclear armed states.

2. Credible signaling in a weak information environment.

Misperception played a crucial role in Iraq-U.S. relations throughout the 1990s and served as a major roadblock to successful deterrence. Saddam assumed that the U.S. had perfect intelligence, so in situations where the U.S. was operating under bad intelligence, Saddam assumed U.S. actions were driven by other motives. The effectiveness of the U.S. decision to use ambiguous and private signals to communicate deterrent threats was also a matter of debate.

Through the Iraq case, we can observe three main stages of deterrence where misperception can play a pernicious role. First, if the threatening state has a false impression of what the other state values, this leads to a threat that is improperly targeted. Second, if the threatened state fails to realize a deterrent threat has been made or fails to properly perceive which actions have been linked with a deterrent threat, this leads to a misunderstanding about the basic nature of the deterrent threat. Third, if the threatening state falsely believes that the threatened state has crossed a line when it has not, this can lead to a triggering of the punishment at an improper time. Overall, a state should be less confident in the effectiveness of deterrence in the presence of a weak information environment.

In the case of North Korea and Iran, the U.S. faces channels of communication that are as weak as or weaker than those between the U.S. and Iraq throughout the 1990s. The impact this weak information environment had on the effectiveness of signaling in the case of Iraq is worth reflecting on as the United States attempts similar strategic communication with Iran and North Korea.

In order for deterrent threats to be credible, the threat-issuing state must be able to credibly commit not to fulfill the threatened punishment if the other nation does not cross the line. This is particularly problematic if, as in the case of the U.S., the same deterrent punishment has been linked to multiple actions by the other state. The U.S. threatened regime change if Saddam did not pull out of Kuwait, and if he used chemical weapons. Thus Iraq perceived that the United States sought to replace the regime regardless of Iraqi actions and that the United States would march to Baghdad whether or not Iraq used WMD.

3. Crisis instability and the threat of nuclear conflict.

For Iran and North Korea, the most likely scenario for use of nuclear weapons would be in an escalating crisis while their nuclear forces are still relatively small. The caution encouraged by nuclear weapons may not be enough to prevent nuclear conflict once conventional conflicts begin or if small nuclear forces are vulnerable to preemptive attacks. The most effective way to prevent use of nuclear weapons in spiraling crisis situations is to diffuse crises before military force is used or before preemptive options become perceived as necessary.

4. Differing interests in new nuclear programs.

The Iraqi nuclear program began with ambiguous goals and was pulled in multiple directions by different bureaucratic interests. The main advocates for building a nuclear weapon were members of the nuclear establishment who saw a weapons program as a way to acquire extra funding and prestige.

Outside force can sometimes have a counter-productive effect if the goal is to stop a nuclear weapons program, especially if that program is stalled or ambiguous. In the case of Iraq, the Israeli attack on the Osirak reactor in 1981 helped unify the opinions of the Iraqi leadership, bureaucracy, and scientific establishment on the need for an Iraqi nuclear deterrent.

This research project also identified lessons (both specific to Iraq and more generally) for perceptions and misperceptions in bilateral relations that could impact the effectiveness of deterrence, and on the study of nuclear weapons development programs:

- Nonproliferation Research Lesson: This research demonstrates how our traditional scholarly categories states seeking "acquisition" or "non-acquisition" of nuclear weapons leave huge grey areas for states that want to leave options open or that aren't even sure what they want or even what capabilities they think they can get.
- Projecting Clear Decision-making Lesson: We too often think that decisions in a country are made just by the head of state or at least always sanctioned by the leader, but the truth is often more complex (there was a lot of stove-piping that made Iraq's nuclear weapons program chaotic).
- Domestic Politics Lesson: We systematically understate the importance of domestic politics in explaining foreign actions; or we don't appreciate the randomness of underlying processes.

- *Perception of U.S. Doctrine Lesson:* We do not always appreciate the degree to which other countries fear that the U.S. might use nuclear weapons first in a crisis or conflict.
- Rampant Misperceptions Lesson: Even when Iraq tried to do the right thing and go above and beyond to ensure that there were no CBW prior to 2003 (e.g., by sending chemical decontamination trucks to old sites to double check that no stores of CBW remained) those actions were held up by the U.S. as evidence of new CBW capabilities.
- Differing Timeframes Lesson: During the course of their relationship, the U.S. was operating on a much shorter time horizon than Iraq. Saddam Hussein was thinking and taking actions in terms of a legacy he hoped would stretch centuries. Interpreting his actions through the lens of a Washington time frame often led to misperception. For example, Saddam didn't even view the 1991 war as a defeat because he had taken on the major superpower and retained control of Iraq. Timeframes matter to perceiving and assessing the values of an adversary.

Overall, the captured Iraqi records provide new evidence on the WMD program and deterrence failures in 1991 and 2003. The complex history of misperceptions and ineffective signaling in the past also raises important questions about the degree to which we can depend on deterrence to work with potential new nuclear states in the future.

Scott Sagan briefed the following U.S. policymakers during and after the project: (1) John Harvey, Principal Deputy Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs; (2) James N. Miller, Under Secretary of Defense for Policy; (3) Brad Roberts, Deputy Assistant Secretary of Defense (Nuclear and Missile Defense Policy)⁵; and

_

⁵ Brad Roberts has since left the Department of Defense, but held this position at the time of discussions.

(4) Elizabeth Sherwood-Randall, White House Coordinator for Defense Policy, Countering Weapons of Mass Destruction, and Arms Control. All were very interested in the findings of the study and are eager to receive additional papers based on the documents in the future. Policy outreach meetings will continue to be conducted on the conclusions of this project.

Scott Sagan would like to thank all project participants for their dedication to this project and the Naval Postgraduate School's Project on Advanced Systems and Concepts for Countering WMD for their generous support of this important research.